



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

MD

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/745,177 | 12/20/2000 | Feng Cao | DSCK-1215 | 7566 |

7590

09/17/2003

Anthony M. Lorusso
LORUSSO & LOUD
440 Commercial Street
Boston, MA 02109

EXAMINER

DUONG, THANH P

ART UNIT

PAPER NUMBER

3711

8

DATE MAILED: 09/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application N .

09/745,177

Applicant(s)

CAO ET AL.

Examiner

Tom P Duong

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 9-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 9-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3 and 9-14, 16, and 18-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatch et al. (5,820,491) in view of Yamamoto et al. (6,063,859) and Blank et al. (5,965,686). Regarding claims 1-3, 9, 11-14, 16, 18, 24, and 26, Hatch et al. disclose a topcoat polyurethane over the golf ball's cover (Abstract) comprising: polysiloxane copolymer (Abstract) constitutes surfactant, isocyanates (Col. 3, lines 59-60) constitutes activator, polyols (Col. 3, lines 45-65) constitutes base, drying accelerator (Dibutyl tin dilaurate), Table 9, and solvent system (Col. 4, lines 20-25). Hatch '491 discloses only one metal catalyst. Blank '686 teaches the use of zirconium catalyst (Abstract) in urethane coating (Col. 1, lines 17-20) to provide a urethane coating with improved cured rate at low temperature or in the presence of moisture over conventional tin catalyst (Col. 1, lines 38-52 and Col. 6, lines 30-36). Thus, it would have been obvious in view of Blank to one having ordinary skill in the art to use zirconium catalyst as taught by Blank in Hatch's urethane coating to provide a golf ball coating with improved cure rate. Thus, the catalyst selection(s) control the reaction and curing rate. Regarding claims 10, 22 and 25, Hatch discloses that it is conventional to use a primer coating to promote adhesion between the cover and top coat of a golf ball

(Col. 2, lines 43-48). Regarding claim 11, Hatch discloses the claimed invention including conventional ionomeric material for the cover. (Col. 1, lines 28-31). Regarding claim 19, Hatch's urethane coating inherently has a pot life over two hours. Regarding claims 20 and 21, Hatch discloses a Flourad FC-430 which is functionally equivalent to the fluorosurfactant of the claimed invention. Regarding claim 23, Hatch discloses the claimed invention including acrylic resin (Col. 6, lines 10-13).

2. Claims 15, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior art as applied in claims 1-14, 16, and 24, above, and further in view of Sugimoto et al. (5,725,443) and Yoneyama (6,210,295). Regarding claims 15 and 17, Sugimoto '443 teaches the use of a thinner (mixture of toluene, ethyl acetate, and etc.) (Col. 3, lines 37-40) to control the viscosity of the coating. Yoneyama also teaches the use of a thinner of the claimed invention (Col. 7, lines 44-46). Thus, it would have been obvious in view of prior art to use the thinner as taught by Sugimoto and Yoneyama in prior art urethane coating to control the viscosity of the coating composition. Regarding claim 19, The prior does appears to have the pot life or coatable time of the claimed invention. Likewise, Yoneyama teaches that it is important to have a pot life about 5 hours to permit adequate time for coating the golf ball before the blended composition completely bonded or dried. Thus, it would have been obvious in view of the prior art to have a good pot life as taught by Yoneyama in order to provide good coating workability.

Response to Arguments

In response to applicant's argument, Official Notice is substituted with cited prior art {(Yamamoto et al. (6,063,859); Blank et al. (5,965,686); Sugimoto et al. (5,725,443); and Yoneyama (6,210,295)} which provides teaching and motivation in combination with Hatch reference.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom P Duong whose telephone number is (703) 305-4559. The examiner can normally be reached on 8:00AM - 4:30PM.

Art Unit: 3711

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Sewell can be reached on (703) 308-2126. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

Tom Duong


Paul T. Sewell
Supervisory Patent Examiner
Group 3700